CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

RESOLUTION NO. XXXX

WAIVING WASTE DISCHARGE REQUIREMENTS
FOR
GEORGE REED INC.
CALAVERAS TRANSIT MIX
CALAVERAS COUNTY

WHEREAS, California Water Code Section 13260(a) requires that any person discharging wastes or proposing to discharge wastes within the region that could affect the quality of waters of the State shall file a Report of Waste Discharge; and

WHEREAS, George Reed, Inc. (Discharger) submitted a Report of Waste Discharge (RWD) on 25 May 2004 for the recycling of process wastewater at its Calaveras Transit Mix concrete batch plant, located in San Andreas, Calaveras County. Subsequent information was received on 19 July 2004, 9 December 2004, and 14 January 2005; and

WHEREAS, wastewater will be generated during the production of Portland cement concrete, and the washing of trucks used to transport the concrete; and

WHEREAS, California Water Code (CWC) Section 13173(b) defines designated waste as:

"Nonhazardous waste that that consists of, or contains, pollutants that, under ambient environmental conditions at a waste management unit, could be released in concentrations exceeding applicable water quality objectives or that could reasonably be expected to affect beneficial uses of the waters of the state as contained in the appropriate state water quality control plan." and

WHEREAS, Title 27 of the California Code of Regulations (CCR) (Title 27) sets forth regulations for management of designated waste. Unless the facility or activity that generates designated waste is exempt from those regulations, any waste management unit used to treat, store, or dispose of designated waste must:

a. Be sited, designed, and constructed in accordance with the applicable performance and minimum prescriptive standards contained therein;
b. Monitored to detect any releases to soil or groundwater (e.g., groundwater monitoring is required);
c. Have an approved closure and post-closure maintenance plan that includes groundwater monitoring for at least thirty years after final closure;
d. Provide financial assurance that funds will be available to finance closure and post-closure maintenance and monitoring; and

WHEREAS, ready-mix concrete facilities blend aggregates, Portland cement, water, and chemical admixtures to create Portland cement concrete. Based on analytical testing of concrete

wastewater samples obtained by Regional Board staff from ten ready-mix plants in late 2002, and samples collected at the Calaveras Transit Mix batch plant, concrete wastewater exhibits the characteristics listed below. This waste is properly classified as designated waste; and

Parameter	Units	Concentration Range	Calaveras Transit Mix Results	Applicable Water Quality Limit[2]
pH	--	7.7 to 12.6	12.0	6.5 to 8.4
Total Dissolved Solids	mg/L	160 to 2,600	1,480	450
Aluminum	ug/L	76 to 310[1]	720	200
Boron	ug/L	2,900 [1]	--	700
Chromium, total	ug/L	53 to 280[1]	160	50
Chromium, hexavalent	ug/L	1.4 to 260[1]	130	21[3]
Molybdenum	ug/L	10 to 300[1]	156	10
Sodium	mg/L	1.3 to 180	43	69
Vanadium	ug/L	26 to 160[1]	--	50

1 Analytical data for filtered samples and represent dissolved concentrations.
2 The water quality limits cited herein are numeric limits selected to apply the narrative water quality objectives for groundwater set forth in the Water Quality Control Plan (Basin Plan) for the Sacramento River and San Joaquin River Basins for protection of the beneficial uses of groundwater. These limits have been selected in accordance with the procedure set forth in that Basin Plan.
3 This limit assumes a 20% relative source contribution, which may not be valid. The California Office of Environmental Health Hazard Assessment is currently developing a Public Health Goal for Chromium VI. Discussions with OEHHA staff indicate that the future PHG is likely to be lower than this value.

WHEREAS, Title 27 exempts certain activities from its provisions under Section 20090 which states, in part:

"The following activities shall be exempt from the SWRCB-promulgated provisions of this subdivision, so long as the activity meets, and continues to meet, all preconditions listed:

...(i) Fully Enclosed Units--Waste treatment in fully enclosed facilities, such as tanks, or in concrete-lined facilities of limited areal extent, such as oil-water separators designed, constructed, and operated according to American Petroleum Institute specification;" and

WHEREAS, this waiver is applicable to the discharges of designated waste liquid to fully enclosed tanks and concrete-lined sumps of limited aerial extent for the purpose of temporary storage and/or recycling provided that the system is designed, constructed, and operated in accordance with certain standards so that the activity can be deemed exempt pursuant to Title 27 Section 20090(i). The facility also has wash pads and paved areas designed specifically to collect the wastewater and convey it

to the sump or tank system. The wash pads and paved areas are considered part of the waste management unit; and

WHEREAS, on 5 October 2002, in accordance with the California Environmental Quality Act (Title 14, California Code of Regulations (hereafter CCR), section 15261 et seq), the Calaveras County Board of Supervisors approved a Negative Declaration for the George Reed Calaveras Transit Mix batch plant; and

WHEREAS, all process material including washout water and residual solids will be recycled into concrete batch plant product; and

WHEREAS, the Discharger proposes to temporarily store and recycle all process concrete batch plant wastewater in a series of concrete sumps and above ground storage tanks. The sumps have a working capacity of approximately 42,560 gallons. Two 20,000 gallons above storage tanks have been installed, and the Discharger proposes to install two additional 20,000 gallon storage tanks; and

WHEREAS, all expansion joints and construction joints within the concrete processing areas and sumps are equipped with continuous PVC water stops to prevent migration of water though the joints; and

WHEREAS, the facility is designed such that all process wastewater from batch equipment and truck washout areas drain back into the concrete settling sumps; and

WHEREAS, the Discharger proposes to retrofit the existing concrete sumps with a water-proof sealant to prevent process water from leaking through cracks and void spaces within the concrete. This work must be completed prior to authorization to begin discharge at the facility; and

WHEREAS, residual solids removed from the concrete sumps will be dewatered, dried, and stored on a 3,300 square foot concrete slab adjacent to the concrete sumps. The concrete slab is designed to drain any excess liquids back into the concrete sumps. When residual solid stockpiles accumulates to approximately 23 to 25 tons, solids will be loaded on a truck and transported to the aggregate facility for recycling; and

WHEREAS, staff have prepared General Waste Discharge Requirements (WDRs) for those discharges of designated waste that are exempt from Title 27 under Section 20090 (i). This tentative Order is currently undergoing public review. This Waiver Resolution contains the same requirements as the tentative General WDRs, and is intended to allow this particular Discharger to begin operation prior to adoption of the General WDRs; and

WHEREAS, the Regional Water Quality Control Board, Central Valley Region (hereafter Regional Board) has a statutory obligation to prescribe waste discharge requirements except where a waiver is not against the public interest; and

WHEREAS, the Regional Board has determined that due to the limited nature and duration of the discharge, the discharge poses little or no threat to water quality. This Waiver Resolution will expire upon enrollment of the Discharger under the General WDRs referenced above; and

WHEREAS, the Regional Board held a hearing on _____and considered all evidence concerning this matter:

RESOLVED, that the California Regional Water Quality Control Board, Central Valley Region, waives waste discharge requirements for the George Reed, Inc. Calaveras Transit Mix batch plant, subject to the following conditions:

Discharge Prohibitions

1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.

2. Discharge of waste classified as "hazardous" as defined in 27 CCR Section 20164 is prohibited.

3. Bypass or overflow of waste from the designated collection pads, sumps, or storage tanks is prohibited.

4. Discharge of designated waste other than to the designated storage and/or recycling system is prohibited.

5. Discharge of domestic wastewater to the designated waste storage and/or recycling system is prohibited.

Liquid Waste Discharge Specifications

1. All wastewater must be contained in a concrete sump or storage tank in such a manner that the wastewater does not contact the ground.

2. Wastewater shall be removed from sumps and storage tanks before capacity is reached, and may be removed by either a contracted waste hauler or by the Discharger.

3. Any wastewater removed from the facility for disposal shall be discharged to an appropriately permitted treatment/storage/disposal facility. The Discharger shall obtain receipts for the transported waste from the licensed hauler and the receiving facility.

4. Neither the treatment nor the discharge of waste shall cause a condition of nuisance or pollution as defined by CWC Section 13050.

5. No waste constituent shall be released or discharged, or placed where it will be released or discharged, in a concentration or in a mass that causes violation of the Groundwater Limitations.

6. Objectionable odors originating at the facility shall not be perceivable beyond the limits of the property owned by the Discharger.

7. As a means of discerning compliance with Liquid Waste Discharge Specification No. 6, the dissolved oxygen content in the upper one-foot of any wastewater sump or open tank shall not be less than 1.0 mg/l.

8. All treatment, storage, and disposal facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

9. Sumps and tanks shall be managed to prevent breeding of mosquitoes. In particular, algae, vegetation, scum, and debris shall not accumulate on the water surface.

10. The waste management unit shall have sufficient storage to accommodate allowable wastewater flow and the applicable design seasonal precipitation in accordance with the criteria set forth in the Design and Construction Standards of this waiver.

11. Freeboard in any sump or tank shall never be less than one foot as measured from the water surface to the lowest point of overflow.

Residual Solid Waste Handling and storage

1. The handling, storage, and off-site disposal of residual solids removed from designated waste liquids shall be conducted in a manner consistent to that which was provided in the RWD.

2. Solids removed from designated waste liquids may be dried (if desired) and stored in the location and manner described in the RWD, and such that any leachate is collected and discharged to an approved sump or tank to which this Waiver applies.

3. Solids drying and/or storage areas shall be designed, constructed, operated, and maintained to prevent the washout or inundation due to floods with a 100-year return frequency.

4. Neither the storage nor the disposal of residual solids waste shall result in nuisance conditions, including odors, storm water impacts, or groundwater impacts.

5. Any residual solids removed from the waste management unit for disposal shall be recycled or discharged at an appropriately permitted disposal facility. If solids are disposed of off-site, the Discharger shall obtain receipts for the transported waste from the licensed hauler and the receiving facility.

Groundwater Limitations

1. The discharge of waste shall not cause the underlying groundwater to contain waste constituents in concentrations statistically greater than background water quality.

Design and Construction Standards

1. All sumps and tanks shall be engineered to completely contain all liquids and shall be designed to provide at least one foot of freeboard at all times.

2. All sump and tank systems shall be designed to provide sufficient storage and disposal capacity to accommodate allowable wastewater flow, direct precipitation, and runoff from tributary paved areas during the following design precipitation events:

   a. The total annual precipitation using a return period of 100 years (i.e., the 365-day, 100 year event), distributed monthly in accordance with historical rainfall patterns;
   b. The 100-year, 24-hour storm event.

3. Wash pads and paved areas shall be sloped to provide positive drainage toward the sump or tank conveyance system and to minimize the depth and duration of ponding on the pavement surface.

4. Wash pads and paved areas shall be equipped with continuous integral curbs to control runoff containing waste constituents.

5. Pipe penetrations and other intentional openings through wash pads and paved wastewater collection areas shall be minimized and properly sealed.

6. Existing concrete pads and curbs shall be coated with an approved waterproofing material manufactured specifically for the purpose.

7. Coatings used to seal concrete pads and sumps shall be manufactured, selected, designed, and installed to be:

   a. Functionally impervious to the waste to be contained;
   b. Completely adhered to the underlying concrete;
   c. Resistant to puncture, tearing, or abrasion damage due to construction activities and expected service conditions;

d. Resistant to damage to due expected environmental conditions (e.g., oxidation, UV radiation, temperature extremes)

8. The existing system shall be retrofitted to meet the conditions of this Waiver. All retrofit work shall be inspected, tested, and repaired or reconstructed (where applicable) in accordance with an approved Construction Quality Assurance (CQA) Plan. The CQA Plan shall be conform to the guidance set forth in *Technical Guidance Document: Construction Quality Assurance For Hazardous Waste Land Disposal Facilities* (EPA Publication No. 530SW86031) and Attachment A of this Waiver. The CQA Plan shall set forth in detail a program of inspection and testing designed to ensure that the applicable design and construction standards are fully achieved. The design professional that prepares the CQA Plan shall be a registered civil engineer or certified engineering geologist and the construction quality assurance program shall be supervised by a registered civil engineer or certified engineering geologist who shall be designated the CQA Officer.

Provisions

1. At least **14 days** prior to the proposed operation, the Discharger shall submit a CQA plan as described in Design and Construction Standards No.8.

2. At least **14 days** prior to the proposed operation, the Discharger shall submit a technical report certifying (1) that it has installed two additional 20,000 gallons above ground storage tanks, and (2) that the concrete sumps have been retrofitted to comply with the requirements of Design and Construction Standards Nos. 6 and 7, and installed, inspected, tested, and repaired (if applicable) in conformance with the CQA plan.

3. By **1 May 2005,** the Discharger shall submit a *Groundwater Monitoring Well Installation Workplan*. The workplan shall describe the proposed installation of at least three groundwater monitoring wells around the concrete sumps. Every monitoring well shall be constructed to yield representative samples from the uppermost layer of the uppermost aquifer and to comply with applicable well standards. The workplan shall be consistent with, and include the items listed in, the first section of Attachment B, "Requirements for *Monitoring Well Installation Workplans and Monitoring Well Installation Reports.*

4. Within **120 days** of staff's approval of the Groundwater Monitoring Well Installation Workplan, the Discharger shall submit a *Groundwater Monitoring Well Installation Report* that describes the installation of groundwater monitoring wells and contains the items found in the second and third sections of Attachment B.

5. The Discharger shall comply with the monitoring and reporting requirements prescribed in the attached (Attachment C) Monitoring and Reporting Program.

RESOLVED, upon submittal of the CQA plan and technical report described in Provision Nos. 1 and 2 above, and upon written approval by the Executive Officer, the Discharger may begin discharging and recycling wastewater into the concrete sumps in compliance with this Resolution.

RESOLVED, upon signature of a Notice of Applicability by the Executive Officer for coverage under *General Waste Discharge Requirements for Temporary Storage and Recycling of Designated Waste Liquids in Fully Enclosed Units*, Waiver Resolution No._____ will be rescinded.

RESOLVED, that this action waving waste discharge requirements is conditional and may be terminated at any time.

I, THOMAS R. PINKOS, Executive Officer, do hereby certify the foregoing is a true, full, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Central Valley Region, on _____.

_____
THOMAS R. PINKOS, Executive Officer

Attachments: A-Construction Quality Assurance Plan
B- Monitoring Well Installation Requirements
C- Monitoring and Reporting Program